

CLAIMS

- 1. A biocompatible lamina 10, comprising denatured serum albumin in a solid state having sufficient water content to be pliable, formed into a film having a thickness 12 in a range of 75μm to 300 μm.
- 2. The biocompatible lamina of claim 1, wherein the serum albumin has a concentration of 50% to 57% w/v.
- 10 2a. The biocompatible lamina of claim 1, wherein the lamina has a thickness 12 of about 250 μm.
 - 3. The biocompatible lamina of claim 1, having a tensile strength of at least about 625 kPa.

15

5

- 4. The biocompatible lamina of claim 1, having an elasticity of about 1700 kPa to 4000 kPa.
- 5. The biocompatible lamina of claim 1, further comprising a chromophore.
 - 6. The biocompatible lamina of claim 1, further comprising at least one biologically active agent.
- 7. A method of manufacturing a denatured albumin lamina 10, comprising:

providing two nonporous sheets 54 arranged in substantially parallel apposition so as to define a space 60 of substantially uniform thickness between the nonporous sheets;

flowably interleaving a serum albumin solution **52** in the space between the nonporous sheets;

enclosing the interleaved serum albumin solution and nonporous sheets in a container 61;

evacuating the container; and

15

30

heating the container sufficiently to convert the serum albumin solution between the nonporous sheets into a solid albumin film.

- 8. The method of claim 7, wherein the nonporous sheets are apposed a spacing of not less than about 75μm.
- 10 9. The method of claim 7, wherein the serum albumin solution has a concentration of about 50% to 58%.
 - 10. The method of claim 7, wherein the serum albumin solution further includes a chromophore.
 - 11. The method of claim 7, wherein the serum albumin solution further includes at least one biologically active agent.
- 12. The method of claim 7, wherein heating the container involves exposing the container to a temperature greater than about 86° C.
 - 13. The method of claim 7, wherein the container is heated for at least about one minute.
- 25 14. A method of repairing a lesion on a solid visceral organ, comprising: applying an energy-absorbing material to a lesion site on the solid visceral organ lesion;

irradiating the proteinaceous fluid with energy sufficient to fuse the energyabsorbing material at least partially to the surface at the lesion site;

applying a biocompatible denatured albumin lamina onto the energyabsorbing material on the lesion site; and irradiating the biocompatible albumin lamina and the proteinaceous fluid with energy sufficient to fuse the biocompatible albumin lamina to the surface at the lesion site.

- 5 15. The method of claim 14, wherein the layer is irradiated sufficiently to achieve substantial hemostasis at the lesion site.
 - 16. The method of claim 14, wherein the biocompatible albumin lamina has an albumin concentration of about 50% to 58%.
 - 17. The method of claim 14, further comprising the step of clamping off blood supply to the lesion site of the solid visceral organ.

10

- 18. The method of claim 14, wherein the energy-absorbing material is a fluid and is applied to a thickness of $100-1000 \mu m$.
 - 18a. The method of claim 18, wherein the wherein the energy-absorbing material is a fluid and is applied to a thickness of 100–250um.
- 20 19. The method of claim 14, wherein the energy-absorbing material comprises a chromophore and the energy is light energy of a wavelength absorbed by the chromophore to fuse the biocompatible albumin lamina to the lesion site.
- 20. The method of claim 19, wherein the biocompatible albumin lamina is translucent to light energy.